FIG. 1

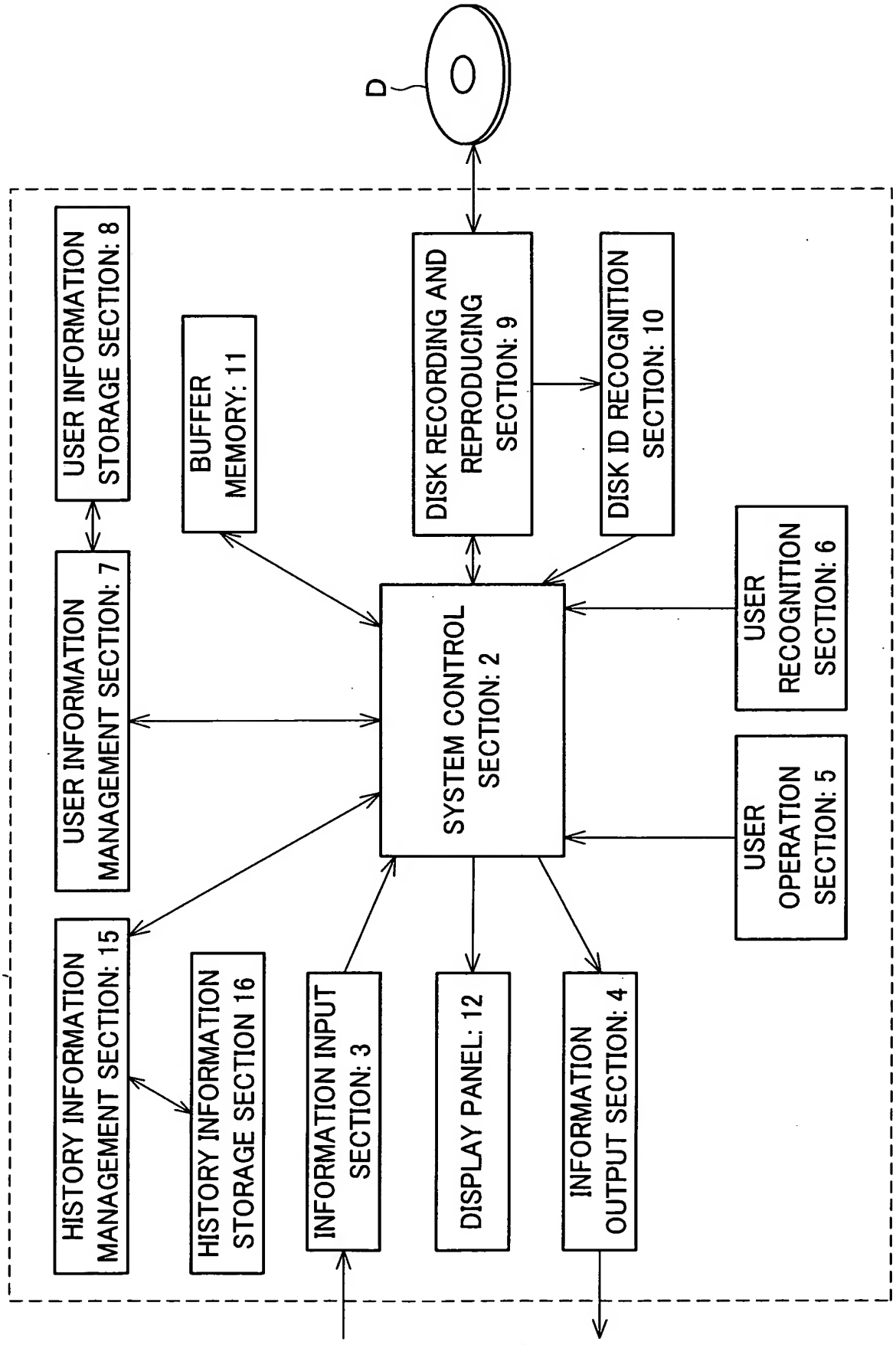
1
D
USER INFORMATION STORAGE SECTION: 8
BUFFER MEMORY: 11
DISK RECORDING AND REPRODUCING SECTION: 9
DISK ID RECOGNITION SECTION: 10
USER INFORMATION MANAGEMENT SECTION: 7
SYSTEM CONTROL SECTION: 2
USER RECOGNITION SECTION: 6
USER OPERATION SECTION: 5
HISTORY INFORMATION MANAGEMENT SECTION: 15
HISTORY INFORMATION STORAGE SECTION 16
INFORMATION INPUT SECTION: 3
DISPLAY PANEL: 12
INFORMATION OUTPUT SECTION: 4

FIG. 2

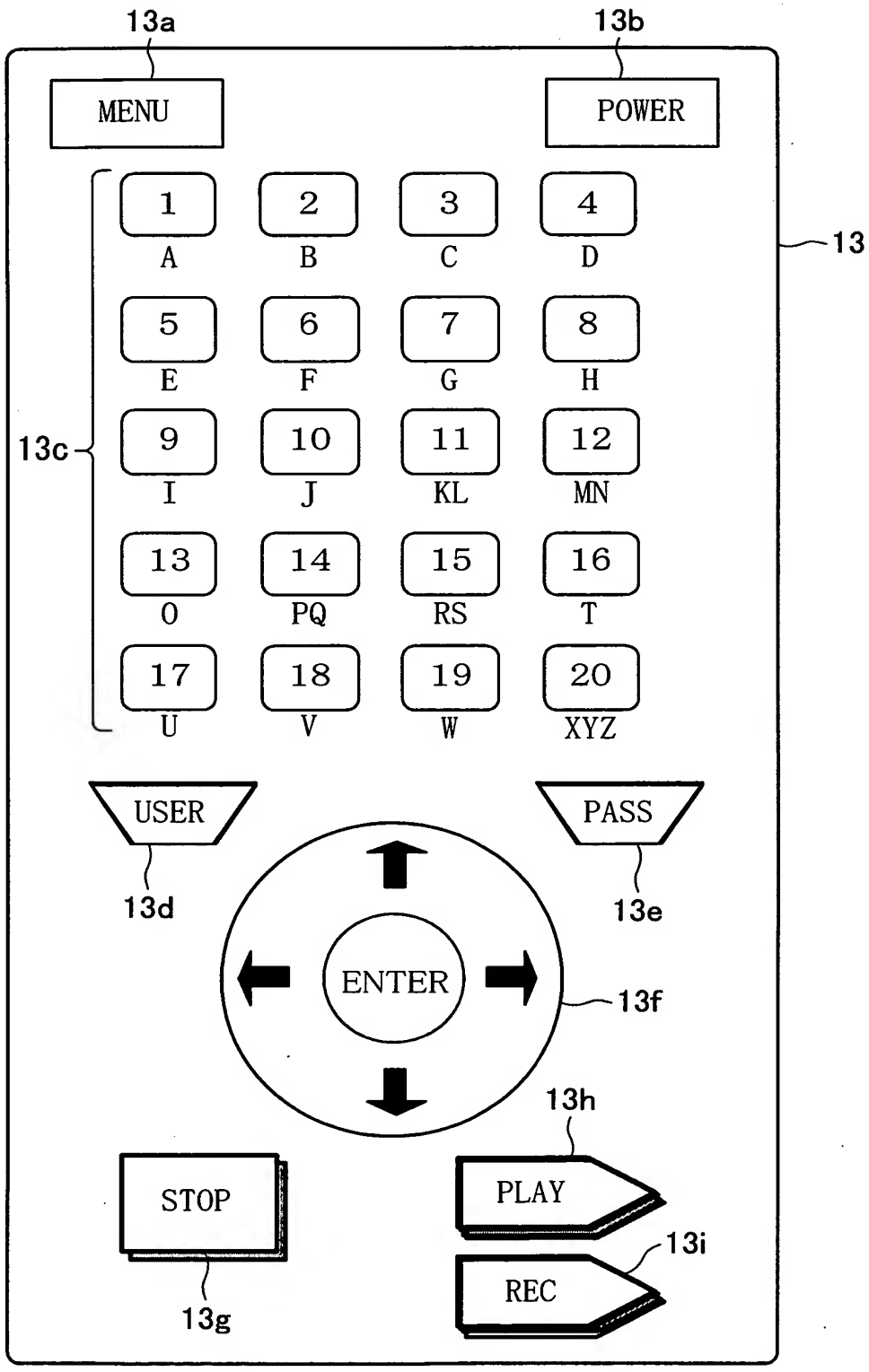
13a
13b
MENU
POWER
1
A
2
B
3
C
4
D
5
E
6
F
7
G
8
H
9
I
10
J
11
KL
12
MN
13
0
14
PQ
15
RS
16
T
17
U
18
V
19
W
20
XYZ
13
13c
USER
PASS
13d
13e
ENTER
13f
13h
STOP
PLAY
13i
REC
13g

FIG. 3

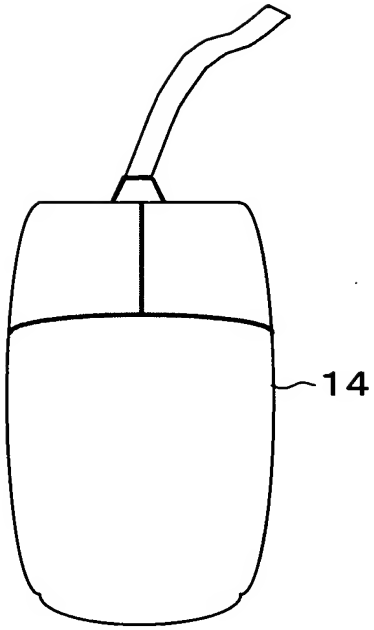
14

FIG. 4

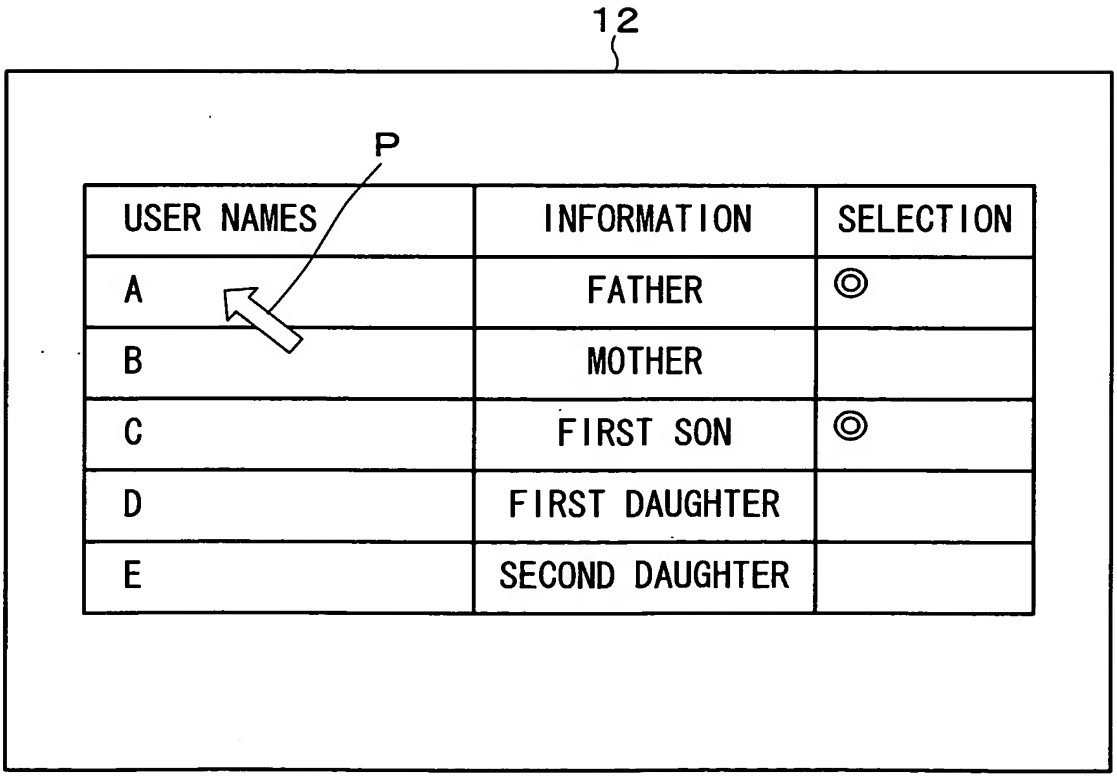
12
P
USER NAMES
INFORMATION
SELECTION
A
FATHER
◎
B
MOTHER
C
FIRST SON
◎
D
FIRST DAUGHTER
E
SECOND DAUGHTER

FIG. 5

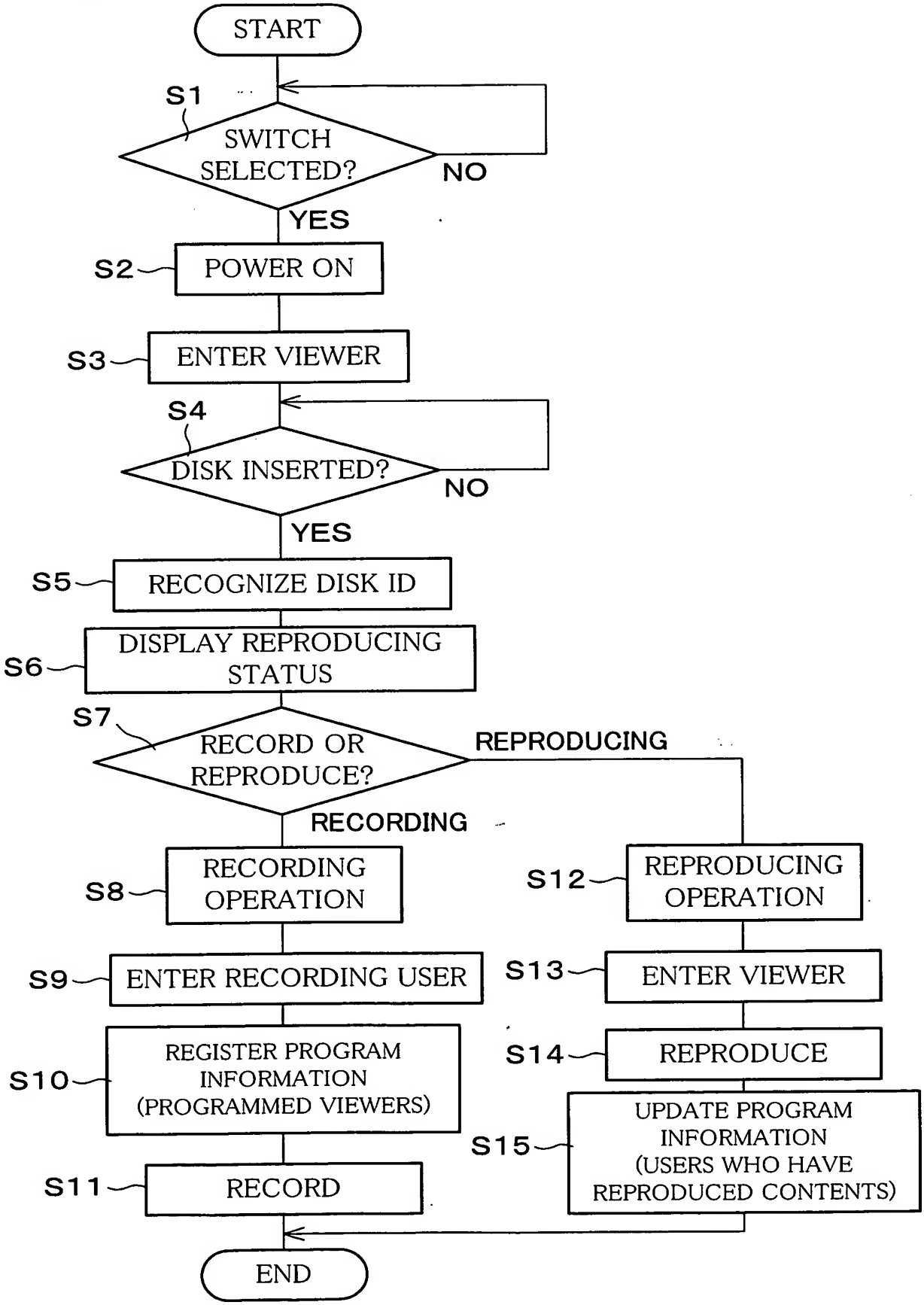
START
S1
SWITCH SELECTED?
NO
YES
S2
POWER ON
S3
ENTER VIEWER
S4
DISK INSERTED?
NO
YES
S5
RECOGNIZE DISK ID
S6
DISPLAY REPRODUCING STATUS
S7
RECORD OR REPRODUCE?
REPRODUCING
RECORDING
S8
RECORDING OPERATION
S9
ENTER RECORDING USER
S10
REGISTER PROGRAM INFORMATION (PROGRAMMED VIEWERS)
S11
RECORD
S12
REPRODUCING OPERATION
S13
ENTER VIEWER
S14
REPRODUCE
S15
UPDATE PROGRAM INFORMATION (USERS WHO HAVE REPRODUCED CONTENTS)
END

FIG. 6

	TITLES	MOVIE Z	SPORTS W	・・・
	RECORDED DATE AND TIME	2002/4/29 19:00 TO 21:00	2002/5/13 15:00 TO 16:00	・・・
	Ch	8 X TV	10 Y TV	・・・
USERS	VIEWERS			
A	−	●	●	
B		◎	○	
C	−	○	●	
D		●	○	
E		×	◎	

◎: USERS WHO RECORDED CONTENTS
○: USERS WHO HAVE REPRODUCED CONTENTS
●: USERS WHO HAVE NOT REPRODUCED CONTENTS
×: UNAUTHORIZED USERS

FIG. 7

	TITLES	SPORTS W	MOVIE Z	・・・
	RECORDED DATE AND TIME	2002/5/13 15:00 TO 16:00	2002/4/29 19:00 TO 21:00	・・・
	Ch	10 Y TV	8 X TV	・・・
USERS				
A		●	●	
C		●	○	

◎: USERS WHO RECORDED CONTENTS
○: USERS WHO HAVE REPRODUCED CONTENTS
●: USERS WHO HAVE NOT REPRODUCED CONTENTS
×: UNAUTHORIZED USERS

FIG. 8

RECORDED DATE	Ch	TITLES	USERS	REPRODUCING STATUS	REPRODUCED DATE
2002/4/29	8	MOVIE Z	A	NOT REPRODUCED	
RECORDED BY: B			B	REPRODUCED	2002/5/10
			C	REPRODUCED	2002/5/10
			D	NOT REPRODUCED	
			E	UNAUTHORIZED	

FIG. 9

USER: C

ENTERED DATE	Ch	TITLES	RECORDED DATE	REPRODUCING STATUS	REPRODUCED DATE
2002/4/15	8	MOVIE Z	2002/4/29	REPRODUCED	2002/5/10
	10	SPORTS W	2002/5/13	NOT REPRODUCED	
	...	...	...		